

WHAT I CLAIM IS:

1. A framing hand tool for trimming an opening casing which includes at least two casing panels, each having front and rear edges and inner and outer faces spanning the front and rear side edges, coupled together at a 90° angle to form a casing joint, said framing hand tool comprising:

a corner clamp assembly including clamping means reacting between the casing and at least a pair of the right angularly related trim pieces, each having inner and outer edges, for urging marginal portions of said trim pieces into abutting relation with each other to form a trim joint in juxtaposition with the casing joint.

2. The framing hand tool set forth in claim 1 wherein said corner clamp assembly includes

a pair of right angularly related mounting bars;

a trim clamp mounted on each of said bars including

a first clamp arm including a first clamp face for bearing against said outer edge of one of said trim pieces; and

a second clamp arm including a second clamp face for bearing against the inner face of one of said panels.

3. The framing hand tool set forth in claim 2 wherein said corner clamp assembly includes means for adjusting the relative positions of said clamp arms toward and away from each other.

4. The framing hand tool set forth in claim 2 wherein said corner clamp assembly includes means, rotatable about an axis, for urging said second clamp face toward said first clamp face.

5. The framing hand tool set forth in claim 1 wherein said corner clamp assembly includes linearly moveable means adjustably mounting said first clamp arm for linear movement toward and away from said second clamp arm and rotatable means for adjustably mounting said second clamp face on said second clamp arm for movement toward and away from said first clamp face.

6. The framing hand tool set forth in claim 1 wherein said corner clamp assembly includes

- a pair of right angularly related mounting support bars;

- a trim clamp mounted on each of said support bars including

- a pair of clamp arms; and

- means for moving said pair of clamp arms toward and away from each other.

7. The framing hand tool set forth in claim 6 wherein said corner clamp assembly includes

- means mounting one of said clamp arms to one of said frame bars;

- linearly adjustable mount means mounting the other of said pair of clamp arms on said one clamp arm for linear movement toward and away from said one clamp arm;

- a fixed clamp face mounted on said other clamp arm and a moveable clamp face adjustably mounted on said one clamp arms;

- rotatably adjustable mount means mounting said moveable clamp face on said one clamp arm for movement toward and away from said fixed clamp face.

8. The trimming hand tool set forth in claim 1 wherein said corner clamp assembly includes

a pair of right angularly related support bars;

a trim clamp mounted on each of said support bars including

first and second spaced apart generally parallel mounting arms;

a first adjustable clamp face;

rotatable means adjustably mounting said first clamp face on said first arm for movement between a remote position and a clamping position clampingly engaging the inner face of one of said casing panels ;

said second arm including a second clamp face for clamping to said outer edge of one of said trim pieces;

said first arm being fixed to said one of said mounting bars; and

means mounting said second arm for movement toward and away from said first arm to move said first clamp face into bearing engagement with said outer edge of said one trim pieces.

9. The trimming hand tool set forth in claim 1 wherein said clamping means clamps said trim members to said panels with the inner edge of each trim member being spaced outwardly of the inner face of the adjacent one of the casing panels.

10. The trimming hand tool set forth in claim 1 wherein said clamping means includes inner and outer clamping faces and means mounting said outer clamping face in clamping engagement with the outer edge of one of the trim members and said inner face in clamping engagement with the inner face of the adjacent one of the casing panels.

11. A clamping assembly for clamping two coplanar trim pieces, each having inner and outer edges, in right angular relation with margins thereof in abutment to form a first

joint in juxtaposition with a second joint formed by abutting end portions of two right angularly related planar frame members having inner and outer planar faces, said clamping assembly comprising:

- a mounting support;

- a pair of right angularly related clamp members mounted on said mounting support;

- each clamp member including

 - a pair of opposing inner and outer relatively moveable clamp faces; and

 - means for urging said clamp faces of each clamp member toward and away from each other including means for moving said outer clamp face into clamping engagement with one of said trim pieces and means for moving said inner clamp face into clamping engagement with the inner planar faces of one of the planar frame members.

12. The clamping assembly set forth in claim 11 wherein each clamping member includes a pair of spaced apart inner and outer clamp arms; said outer face being mounted on said outer arm and said inner face being movably mounted on said inner arm.

13. The clamping assembly set forth in claim 12 including rotatable means mounting said inner face on said inner arm and means adjustably mounting said outer arm for movement on said inner arm.

14. The clamping assembly set forth in claim 11 wherein said means for urging said clamp faces includes means for moving said outer clamp face into clamping engagement with said outer edge of said one trim piece, and means for moving said

inner clamp face into clamping engagement with the inner planar face of the adjacent one of the planar frame members.

15. The clamping assembly set forth in claim 11 wherein said mounting support comprises a pair of right angularly related support bars; and means for mounting said support bars in a position inwardly of the planar frame members.

16. The clamping assembly set forth in claim 15 wherein each clamp member includes inner and outer clamp arms; said outer clamp arm mounting said outer clamp face and including a terminal end; and an inner threaded member, threadedly mounted on said inner arm for rotation about an axis, mounting said inner face for movement toward and away from said outer face.

17. The clamping assembly set forth in claim 16 wherein said axis and said terminal end lie in the same plane.

18. The clamping assembly set forth in claim 17 wherein said inner clamp arm includes a slot therethrough; and including a rod fixed to said outer arm and slidably adjustably received in said slot for adjustably mounting said outer arm on said inner arm.

19. The clamping assembly set forth in claim 18 including hand graspable handle means coupled to said threaded member for rotating said threaded member about said axis;

said slot being slightly larger than said rod to allow limited swinging movement of said rod relative to said inner clamp arm.

20. A trim tool for trimming an opening casing having

at least two right angularly disposed planar opening frame members,

lying in right angularly disposed first and second planes, and

having abutting end portions, forming a frame joint,
each frame member including inner and outer frame faces,
said trim tool comprising:

clamp assembly means for clamping a pair of right angularly related coplanar trim members to the two frame members with the plane of the coplanar trim members being perpendicular to the first and second planes of the frame members;

each of the trim members having inner and outer edges and an end abutting the end of the other trim member to form a trim joint adjacent the frame joint.

21. The trim tool set forth in claim 20 wherein said clamp assembly means comprises a mounting support including a pair of right angularly disposed support bars adapted to be mounted inwardly of the inner faces of the frame members; and

clamp apparatus mounted on each of said support bars including:

an inner clamp arm mounted on one of said support bars and an outer clamp arm mounted on said inner clamp arm and having an outer clamp face for clamping against the outer edge of one of said trim member; and

an inner clamp face provided on said inner clamp arm for clamping against the inner frame face of one of said frame members.

22. The trim tool set forth in claim 21 wherein said clamp apparatus includes means adjustably mounting said outer clamp arm on said inner clamp arm.

23. The trim tool set forth in claim 21 wherein said clamp apparatus includes means mounting said inner clamp face for movement on said inner arm toward and away from said outer clamp face.

24. The trim tool set forth in claim 23 wherein said means mounting said inner clamp

face is rotatable.

25. The trim tool set forth in claim 20 wherein said clamp assembly means clamps said trim members to said frame members with said inner edge of each said trim member spaced outwardly of the inner face of the adjacent frame member.

26. The trim tool set forth in claim 20 wherein said clamp means includes an outer clamp face for clamping against said outer edge of one of said trim members and an inner clamp face for clamping against the inner frame face of one of the frame members; and means for moving said clamp faces toward and away from each other.

27. A trim tool for trimming an opening casing with a trim frame including at least two right angularly disposed trim boards each having inner and outer edges and a terminal end abutting the terminal end of the other trim board to form a trim joint, said opening casing being mounted in an opening provided in an upstanding wall having a vertical face, said opening casing having at least two right angularly disposed, planar frame members, having terminal abutting ends forming a frame joint, each planar frame members provided with inner and outer planar faces spanning front and rear edges, said front edges being disposed flush with the vertical face,

said trim tool comprising:

a corner clamp assembly for clamping the two right angularly disposed trim boards, to the front sides of the two frame boards with the inner edges disposed outwardly of the inner planar faces of the planar frame member and said trim joint disposed adjacent the frame joint.

28. The trim tool set forth in claim 27 wherein said corner assembly comprises clamp means reacting between the opening frame members and the trim boards for urging the

terminal ends of said trim members into abutting relation.

29. The trim tool set forth in claim 28 wherein said clamp means includes inner and outer clamp faces, and means mounting said inner and outer clamp faces for movement between nonclamping positions and clamping positions in clamping engagement with at least one of said inner planar faces and at least one of said outer edges, respectively.

30. The trim tool set forth in claim 27 wherein said corner assembly includes a mounting support and a pair of clamp means mounted on said mounting support at right angles to each other for reacting between the inner planar faces of said frame members and the outer edges of the trim boards for urging the terminal ends of the trim boards into abutting relation.

31. The trim tool set forth in claim 27 wherein said corner assembly includes a mounting support and a pair of right angularly disposed clamp means mounted on said mounting support for detachably clamping said trim members to said frame members; each of said clamp means including inner and outer opposing clamp faces for clamping against one of said inner planar faces and one of said outer edges, respectively, and means for moving said inner and outer clamp faces between nonclamping positions and clamping positions clamped to said one inner face and said one outer edge, respectively.

32. The trim tool set forth in claim 31 wherein said outer clamp face projects rearwardly toward the vertical face a predetermined distance relative to said mounting support and said inner clamp face projects rearwardly from said mounting support a greater predetermined distance.

33. The trim tool set forth in claim 27 wherein said corner assembly includes a mounting support adapted to be spaced forwardly from the vertical wall, and a pair of right angularly related clamp means mounted on said mounting support for clamping said trim members to said opening frame members; each of said clamp means including inner and outer clamp arms projecting rearwardly away from said mounting support; said outer clamp arm including a terminal end for bearing against the vertical face of the wall and said outer clamp face being disposed on a terminal portion of said outer clamp arm adjacent said terminal end.

34. The trim tool set forth in claim 33 wherein said inner clamp arm projects rearwardly from said mounting support a greater predetermined distance greater than said predetermined distance and includes a terminal portion mounting said inner clamp face.

35. The trim tool set forth in claim 34 wherein said clamp means includes means for moving said inner clamp face relative to said inner clamp arm.

36. The trim tool set forth in claim 35 wherein said means for moving said inner clamp face is rotatable about an axis.

37. The trim tool set forth in claim 36 including means mounting said inner and outer clamp arms together for relative movement to any selected one of a plurality of different spaced apart preset positions prior to being mounted on the opening frame members.

38. The trim tool set forth in claim 37 wherein said means mounting said inner and outer clamp arms comprises an aperture in said inner arm and a rod coupled to said outer arm and slidably received in said inner arm.

39. The trim tool set forth in claim 38 wherein said rod has a plurality of spaced apart teeth for engaging a portion of said inner arm adjacent said aperture for detachably

holding said outer arm in any selected one of said plurality of present positions.

40. A trim tool for trimming an opening casing having a pair of opening frame members lying in a pair of planes intersecting each other at a 90° angle; said trim tool comprising:

a corner clamp assembly for detachably clamping right angularly disposed coplanar trim members, lying in a third plane perpendicular to each of said pair of planes, to the pair of opening frame members.

41. The trim tool set forth in claim 40 wherein said clamp assembly includes

a mounting support, and

a pair of right angularly disposed clamp members mounted on said mounting support, each clamp member including inner and outer relatively moveable clamp faces, and

means for relatively moving said inner and outer faces toward and away from each other between non-clamping positions and clamping positions in which said outer face is clamped to one of said trim members and said inner face is clamped to one of said frame members.

42. The trim tool set forth in claim 40 wherein said clamp assembly includes

a mounting support;

a pair of right angularly disposed clamp members mounted on said mounting support, each clamp member including inner and outer relatively moveable parallel clamp arms mounted on said mounting support;

said inner clamp arm being longer than said outer clamp arm; and

means for relatively moving said inner and outer clamp arms toward and away from each other between non-clamping positions and clamping positions in which said

outer arm is clamped to one of said trim members and said inner arm is clamped to one of said frame members.

43. The trim tool set forth in claim 42 wherein said clamp assembly includes means mounting said outer clamp arm on said inner clamp arm for limited relative swinging movement as said inner and clamp arms are forced into clamping engagement with said inner face of said opening frame member and said outer edge of said trim frame member, respectively.